

drawn backwards and inwards towards the middle line till they are now divided only by a narrow space. Finally, in this degenerate tail all the rectrices are attached at their bases to the pygostyle, whereas in the normally developed rectrices the outermost, at any rate, are divorced therefrom.

The somewhat thicker shaft is practically the only distinguishing character between these rectrices and their coverts.

XXIV.—*Contributions to the Ornithology of Egypt*.—No. II.
Birds of the Province of Giza. Part 2*. By MICHAEL J. NICOLL, F.Z.S., M.B.O.U.

69. *ORIOIUS GALBULA*.

Oriolus galbula Shelley, p. 156.

The Golden Oriole is a regular visitor during the spring and autumn migrations. I have frequently heard it singing in the spring. In the autumn nearly all those I have met with have been immature birds. The few adult males seen during the autumn are amongst the first arrivals.

During the spring migration of 1909 great numbers of Golden Orioles frequented the mulberry-trees in the Giza Zoological Gardens.

70. *LANIUS EXCUBITOR ELEGANS*.

Lanius lathora Shelley, p. 115.

Lanius excubitor elegans Swains.; Hartert, Vög. d. pal. Fauna, iv. p. 427.

This form of the Great Grey Shrike is a resident in Egypt and breeds in suitable localities in the Province.

It has not previously been recorded as a breeding species in Egypt. I have not yet met with the typical *L. excubitor* in that country.

* Continued from above, p. 302. The figure of *Scotocerca inquieta* in the first part of this paper (Plate IV.) is accurate as regards its attitude, but is too dark on the upper parts. Unfortunately it was not possible to submit the coloured proof to the author for approval.—M. J. N.

71. LANIUS MINOR.

Lanius minor Shelley, p. 115.

I possess an adult male of this species shot by Capt. Seppings on 5th Sept., 1907, near Giza. This is the only record I have of the occurrence of the Lesser Grey Shrike in the Province of Giza, though it is probably a regular visitor on migration, seeing that it winters in South Africa.

72. LANIUS COLLURIO.

Lanius collurio Shelley, p. 117.

The Red-backed Shrike is a regular visitor during the autumn migration in August and September. The adults appear to arrive before the young. Of the old males obtained by myself in the middle of August, one is in nearly full winter plumage, while two others have only begun their moult. An old female shot 25th August, 1907, is assuming a plumage approaching that of the male.

Up to the present time I have not met with this species in spring in Egypt.

73. LANIUS POMERANUS NILOTICUS.

Lanius senator niloticus Hartert, Vög. d. pal. Fauna, i. p. 436.

Lanius auriculatus Shelley, p. 117.

A Woodchat-Shrike caught at Abu Roash in the Province of Giza, April 6th, 1905, lived for four months in the Giza Zoological Gardens. Mr. E. W. Buckley informs me that he has frequently seen Woodchats near Ayat in this Province.

During the spring and early summer of 1905 many examples of this Shrike were brought to me by a Bedouin who had caught them near Abu Roash, in the Province. This form differs from the typical Woodchat in having the bases of *all* the rectrices white.

74. LANIUS NUBICUS.

Lanius nubicus Shelley, p. 116.

The Masked Shrike is a common visitor during the spring migration, but less numerous during the passage south in autumn.

75. MUSCICAPA GRISOLA.

Muscicapa grisola Shelley, p. 118.

The Spotted Flycatcher is a regular visitor during both the spring and autumn migrations.

76. MUSCICAPA ATRICAPILLA ATRICAPILLA.

Muscicapa atricapilla Shelley, p. 119.

The Pied Flycatcher passes through in some numbers during the spring migration, but is much less common in autumn, and at the latter season I have only met with young birds.

77. MUSCICAPA ATRICAPILLA SEMITORQUATA.

Muscicapa atricapilla semitorquata Hom.; Hartert, iv. p. 483.

The only "record" of this Flycatcher from Egypt seems to be that of an adult male shot by myself in the Giza Zoological Gardens in April 1909. It frequented the Gardens for seven days, and when shot was very fat, a sure sign that it was about to continue its migration.

78. MUSCICAPA COLLARIS.

Muscicapa collaris Shelley, p. 120.

The Collared Flycatcher is a regular visitor during the spring migration, but up to the present time I have not met with it in autumn.

79. MUSCICAPA PARVA.

On November 11th, 1906, I obtained a female example of the Red-breasted Flycatcher in the Giza Zoological Gardens (cf. Bull. B. O. C. vol. xix. p. 31). This appears to be the only record of this species for Egypt.

80. HIRUNDO RUSTICA RUSTICA.

Hirundo rustica Shelley, p. 120.

The European Chimney-Swallow is a regular visitor during the spring and autumn migrations.

81. HIRUNDO RUSTICA SAVIGNII.

Hirundo riocourii Shelley, p. 121.

The Egyptian Chimney-Swallow is a resident in the Province of Giza. In this species the female is paler below than the male.

82. CHELIDON URBICA.

Chelidon urbica Shelley, p. 125.

The House-Martin seems to be a regular spring and autumn visitor in small numbers.

83. COTILE RIPARIA SHELLEYI.

Cotile shelleyi Sharpe, Cat. Birds B. M. x. p. 100 (1885).

Shelley's Sand-Martin arrives in spring and breeds in the Province. In the autumn it collects in huge parties, old and young together. Adults obtained in September are in full moult.

84. COTILE RIPARIA RIPARIA.

The Common Sand-Martin passes through the Province during the spring migration. I have not yet met with it, for certain, in autumn.

85. COTILE RUPESTRIS OBSOLETA.

Cotyle obsoleta Shelley, p. 123.

This Pale Crag-Martin is a resident in the desert parts of the Province, though it is not very common during the winter.

86. CARDUELIS ELEGANS.

Carduelis elegans Shelley, p. 152.

The Goldfinch appears to be resident in the Province, but in small numbers. A pair, at least, nested in a wild state in the Zoological Gardens during the summer of 1907. I saw the old birds feeding their young on the branch of a plane-tree. During the autumn old and young birds may be met with in small parties. I have as yet no specimens, so cannot say to which form the Egyptian Goldfinch should be referred.

87. CHRYSOMITRIS SPINUS.

The Siskin has not previously been recorded from Egypt. On February 11th, 1907, a pair were seen in the Zoological Gardens, and from that time onward till the end of the following month numbers frequented the Gardens, where they were daily to be seen in small flocks feeding on the buds of the apricot-trees.

It would seem that an invasion of this species took place in Egypt at that time, for Mr. G. E. Burnett Stuart informs

me that such quantities of Siskins visited Lower Egypt that in the neighbourhood of Mariout nearly the whole of the barley-crop was destroyed, while still green, by these birds.

On October 26th of the same year I caught a female Siskin in my garden, whither it had been attracted by a caged male. Since that time I have not heard of the occurrence of this species in Egypt.

88. *SERINUS HORTULANUS*.

Serinus hortulanus Shelley, p. 154.

A pair of Serins frequented the Zoological Gardens during February 1908, and again in the same month of 1909. I have no other records of this species from the Province.

89. *LINOTA CANNABINA MEDITERRANEA*.

Linota cannabina Shelley, p. 154.

Acanthis cannabina mediterranea Tschusi; Hartert, Vög. d. pal. Fauna, i. p. 75.

After a careful examination of a series of Linnets collected by Mr. Bonhote and myself at Giza, we have come to the conclusion that they all belong to this form. These examples are smaller, paler, and paler red (males) on the breast than the North-European form. This Linnet is a regular visitor to the Province during the winter months. It collects in flocks and is extremely shy.

90. *COCCOTHAUSTES VULGARIS*.

Coccothraustes vulgaris Shelley, p. 150.

A Hawfinch was caught alive in the Zoological Gardens on December 16th, 1904.

I have not personally met with this species in Egypt, but have heard of other occurrences outside the Giza Province.

91. *SPORÆGINTHUS AMANDAVA*.

Sporæginthus amandava Sharpe, Cat. Birds, xiii. p. 320.

A form of Amadavade Finch occurs regularly in August in the Zoological Gardens at Giza, in many of the gardens of Cairo, and possibly in other parts of Lower Egypt. As soon as they arrive, which they do in large numbers, these birds start nesting, and directly the young can fly *all take their departure*, and are not met with again till the following

August. At the Delta barrage these birds arrive somewhat earlier, as I am informed by Mr. W. Draper, the Superintendent of the Gardens there, than they do at Giza. It is remarkable that this species should occur in Egypt, and where they come from and where they go after nesting is at present unknown.

Shelley, in his 'Birds of Egypt,' p. 152, mentions an *Estrela melanorhyncha* as occurring near Alexandria, and as he did not meet with it he copies a description given by Von Heuglin. If this should prove to be the same as my birds, Von Heuglin's description must be that of a young bird, a female, or a "male out of plumage."

I am unable at present to find any differences between Giza birds and Indian examples.

92. *PASSER DOMESTICUS INDICUS.*

Passer domesticus Shelley, p. 148.

Passer domestica subsp. ? Hartert, Vög. d. pal. Fauna, ii. p. 151.

Passer domesticus indicus Nicoll, Ibis, July 1908, p. 497.

For the present I place the Sparrow of the Delta under the above name, as it is almost indistinguishable from the Indian bird. The ear-coverts of *P. d. indicus* are certainly whiter than those of the Delta Sparrow, and I fancy that the red of the upper parts is deeper in the Indian examples.

This Sparrow is abundant in the cultivated parts of the Province and ranges over the whole Delta. How far south it extends I do not at present know.

93. *FRINGILLA CŒLEBS.*

Fringilla cælebs Shelley, p. 15.

The Chaffinch is a regular winter visitor in small numbers; in some years it appears to be more abundant than in others.

94. *PASSER HISPANIOLENSIS.*

Passer salicicola Shelley, p. 149.

During April 1909 numbers of Spanish Sparrows were seen in the Zoological Gardens. Although it abounds in the Delta during the winter, I have no other records of the species from the Province of Giza.

95. ERYTHROSPIZA GITHAGINEA.

Erythrospiza githaginea Shelley, p. 155.

The only records I have of the Trumpeter Bullfinch from the Giza Province are two examples seen by myself near Helwan on February 21st, 1908, five seen by myself at Abu Roash, February 1909, and an adult male which I shot in the Wadi Hof on May 7th, 1909.

96. EMBERIZA MILIARIA.

Emberiza miliaria Shelley, p. 144.

The Corn-Bunting is a regular winter visitor to the Province. Although it is usually met with in pairs or singly, it sometimes collects in large flocks, for on February 4th, 1909, I saw a party of several hundred individuals near the Giza Pyramids, where they were feeding in a patch of Lupins.

97. EMBERIZA CÆSIA.

Emberiza cæsia Shelley, p. 146.

Cretzschmar's Bunting appears to be a regular visitor during the autumn migration. The first arrivals, which consist of adults, appear in September, and are soon joined by younger birds. I have frequently seen flocks of a dozen or more individuals in the Zoological Gardens. After a short stay they gradually depart. Capt. Shelley calls this bird a spring visitor to Egypt, and mentions shooting an example near Cairo in April. He further states that it breeds occasionally in the Delta and near Cairo. Personally I have never met with this species in spring, nor have I, during two and a half years' residence in Giza, any records of its occurring at that time of year in the Province of Giza, though I have seen it in the Fayoum in March.

98. EMBERIZA HORTULANA.

Emberiza hortulana Shelley, p. 145.

I have but two records of the Ortolan from Giza—an adult shot by Mr. J. L. Bonhote, April 3rd, 1909, at Abu Roash, and one seen by myself in the Zoological Gardens during April 1909. It is possible, however, that this species is a regular spring migrant in the Province.

99. ALÆMON ALAUDIPES (Desf.).

Certhilauda desertorum Shelley, p. 135.

Alæmon alaudipes alaudipes (Desf.); Hartert, Vög. d. pal. Fauna, iii. p. 250.

The Bifasciated Lark is met with singly, in pairs, or in small flocks on the edge of the desert in the Province. I have specimens of two distinct phases collected by Mr. Bonhote and myself, one rufous-sandy above with small markings on the breast, the other greyish above with large blotches of black: in some specimens these blotches coalesce and form patches.

Up to the present time I have no breeding examples from Egypt.

100. GALERIDA CRISTATA NIGRICANS.

Galerita nigricans Brehm, Vogelfang und Naumannia, 1858, p. 206.

Galerida cristata nigricans Brehm; Hartert, Vög. d. pal. Fauna, ii. p. 227.

This dark form of the Crested Lark ranges in the Delta from Damietta to Cairo. It is common near Giza and nests in the Birseem fields. I have a series of specimens obtained at different times of the year, and in all of these the markings on the breast are very black and broad.

101. GALERIDA CRISTATA (?).

Amongst my series of Giza Crested Larks I have a specimen which I shot during the winter, entirely different from *G. c. nigricans*—paler and less thickly spotted on the breast. This bird exactly matches one shot by myself at Damietta in January, and three collected near Port Said by Commander H. Lynes, now in Mr. H. F. Witherby's collection. As I do not at present know the breeding-place of this form I consider it inadvisable to give it a name. It is possible that it breeds near Lake Menzaleh, but, on the other hand, it may be an immigrant from somewhere in Southern Europe. I hope to be able to find out more about its breeding-place shortly.

I have not yet met with *G. c. altirostris*.

102. ALAUDA ARVENSIS CINEREA.

Alauda arvensis cristata Ehmcke; Hartert, Vög. d. pal. Fauna, iii. p. 247.

This Grey Skylark is a most abundant winter visitor to Egypt. I have a series of specimens collected near Giza, and have examined several more collected by Mr. J. L. Bonhote.

103. ALAUDA ARVENSIS CANTARELLA.

Alauda arvensis cantarella Bonaparte; Hartert, Vög. d. pal. Fauna, iii. p. 246.

Amongst the swarms of Skylarks which visit Egypt during the winter months I have obtained specimens of this form in the Province. It is browner and less clearly marked on the back than *Alauda a. cinerea*.

104. ALAUDA ARBOREA.

Alauda arborea Shelley, p. 139.

On November 25th, 1906, I saw a Woodlark in the Giza Zoological Gardens. It was running about one of the lawns, and finally flew up into a tree. I have no other record of this species from the Province or from Egypt.

“Brehm mentions having met with the Woodlark once in Lower Egypt in the winter” (*Shelley*), so that it is possible that it may occasionally occur in this country.

105. AMMOMANES DESERTI ISABELLINA.

Melanocorypha arabs Brehm, Vogelfang, p. 132 (1855).

Ammomanes deserti isabellina Hartert, op. cit. i. p. 223.

The Desert-Lark is abundant near Helwan and in the Mokattam Hills. On February 9th, 1909, Mr. J. L. Bonhote saw an *Ammomanes*, which probably belonged to this form, at Abu Roash. This Lark breeds near Helwan, for I have obtained very young examples there in August.

I have not seen any specimens of *A. d. deserti* from Lower Egypt. All that I have examined belong to the paler, more sandy-coloured *A. d. isabellina*.

I have compared Giza specimens with Brehm's type of *Melanocorypha arabs* in the Tring Museum, and find that they exactly match.

106. *AMMOMANES PHÆNICURA ARENICOLOR.*

Alauda arenicolor Sundevall, *Œfv. K. Vet.-Akad. Förh.* Stockholm, 1850, p. 128.

Ammomanes arenicolor (Sundev.); Shelley, p. 137.

Ammomanes phænicura arenicolor (Sundev.); Hartert, *Vög. d. pal. Fauna*, ii. p. 224.

Although I have not actually met with this Desert-Lark in the Giza Province I include it in the present paper, as on February 28th, 1908, I obtained two specimens near Abbassia, a short distance from Cairo, and only just outside the Province boundaries.

107. *CALANDRELLA BRACHYDACTYLA BRACHYDACTYLA.*

Calandrella brachydactyla (Leisler); Shelley, p. 141.

The Short-toed Lark is a regular visitor in spring and autumn and is usually met with in flocks.

108. *CALANDRELLA MINOR MINOR.*

Calandrella minor Cabanis, *Mus. Hein.* i. p. 123 (1851—"N.O.-Afrika").

Calandrella minor minor (Cab.); Hartert, *Vög. d. pal. Fauna*, ii. p. 218.

I have only once met with this form in the Province, on February 25th, 1907, at the edge of the cultivation near the Giza Pyramids.

109. *STURNUS VULGARIS PURPURASCENS.*

Sturnus purpurascens Gould, *P. Z. S.* 1868, p. 219 (typ. loc. Erzeroum).

Sturnus vulgaris purpurascens Gould; Hartert, *Vög. d. pal. Fauna*, i. p. 46.

On November 13th, 1907, I shot an adult female of this form near Giza; it was accompanied by two other Starlings, but owing to their excessive shyness I was unable to get another example.

During the winter large numbers of Starlings frequent the cultivated lands, but they are nearly always unapproachable. I have specimens of two other forms of Starlings from Egypt: *Sturnus vulgaris vulgaris*, shot at Damanhour, and

S. v. pollaratskyi, shot by myself at Bilbeis in Lower Egypt.

Sturnus vulgaris purpurascens has not previously been recorded from Egypt.

110. CORVUS CORNIX CORNIX.

Corvus cornix Linn. ; Shelley, p. 159.

Corvus cornix sharpii Hartert, Vög. d. pal. Fauna, i. p. 10.

The Hooded Crow is abundant and resident in the alluvium of the Giza Province.

An example with much white in the wings and tail has frequented the Zoological Gardens for over a year and is still living there.

I cannot separate the Egyptian "Hoodie" from the Northern European form.

111. CORVUS CORAX UMBRINUS.

Corvus umbrinus Shelley, p. 158.

The Brown-necked Raven is a common resident in the desert parts of the Province.

112. CYPSELUS APUS MURINUS.

Cypselus pallidus Shelley, p. 172.

The Pale Swift is a common breeding-bird in the Province and I believe that a few stop for the winter.

I have not met with the Common Swift for certain, though it possibly passes through on migration. At a distance it is impossible to distinguish between the two forms.

113. CYPSELUS MELBA.

Cypselus melba Shelley, p. 171.

The Alpine Swift is an uncommon visitor to the Province during the autumn migration.

114. CAPRIMULGUS EUROPÆUS.

Caprimulgus europæus Shelley, p. 174.

The Nightjar is a regular visitor during both the spring and autumn migrations.

I once met with an example—an adult male—in December, but as it had half its tail missing I imagine that it had been delayed by injury from continuing its migration southwards.

115. *CAPRIMULGUS ÆGYPTIUS*.

Caprimulgus ægyptius Shelley, p. 175.

The Egyptian Nightjar is a resident, though I believe that its numbers are increased during the spring by migrants passing through on their way northwards.

116. *LYNX TORQUILLA*.

Yunx torquilla Shelley, p. 161.

The Wryneck is a regular visitor during both the spring and autumn migrations.

117. *ALCEDO ISPIDA BENGALENSIS*.

Alcedo bengalensis Shelley, p. 166.

This small Kingfisher arrives in the Giza Zoological Gardens in August and remains till April. I have no records of its remaining throughout the summer. Neither have I ever seen the common European Kingfisher, *A. ispida ispida*.

118. *CERYLE RUDIS*.

Ceryle rudis Shelley, p. 167.

The Pied Kingfisher is common and resident.

119. *CORACIAS GARRULUS*.

Coracias garrula Shelley, p. 168.

The European Roller is a spring and autumn visitor on migration.

In the autumn the adults appear to arrive first and are immediately followed by the young birds.

120. *MEROPS APIASTER*.

Merops apiaster Shelley, p. 169.

The Common Bee-eater is a regular visitor in very large numbers during both migrations.

121. MEROPS PERSICUS.

Merops ægyptius Shelley, p. 170.

Merops persicus Sharpe, Cat. B. xvii. p. 66.

The Blue-cheeked Bee-eater appears to pass through the Province a little earlier than the preceding species. It probably breeds in certain parts of the Province. Major Sparrow tells me that he has seen it near Mazghouna in April, and from the appearance of specimens obtained in the Delta in May I have little doubt that they were about to nest there.

122. MEROPS VIRIDIS.

Merops viridis Shelley, p. 171.

The Little Green Bee-eater is a resident and breeds in the Giza Province. Dr. Walter Innes tells me that he has taken eggs near Mazghouna, where the bird nests in holes in the ground amongst the "Sont" (Acacia) trees.

123. UPUPA EPOPS EPOPS.

Upupa epops Shelley, p. 155.

The Hoopoe is a regular visitor to the Province during the spring and autumn migrations.

124. UPUPA EPOPS MAJOR.

Upupa major Brehm, Vogelfang, p. 78 (1855).

A number of Hoopoes are resident in Lower Egypt, and examples of these, obtained in the Delta during the winter by Mr. J. L. Bonhote and myself, exactly match Brehm's type of *U. major*—which is a female adult (16/3/49) obtained by von Müller's expedition in Egypt and now preserved in the Tring Museum.

The following is a translation of Brehm's description of this bird:—"It is $\frac{1}{3}$ larger than all others, up to 12" large, $2\frac{1}{2}$ " length of bill."

In our specimens the bill is *always* longer, and much deeper at the base, than in European examples and those obtained in Giza during migration. Some of them agree in size with Brehm's type, but the majority are not markedly larger than the common form, except as regards the bill.

This is a perfectly good form and it is interesting to

rediscover it, though somewhat strange that it should have remained unrecognised all these years.

Although I have not met with this form up to the present in the Giza Province it probably occurs there, and I insert it in the present paper, as I consider that it is of importance to call attention to this long unrecognised bird. During the winter I have never met with any Hoopoes in the Province, but all those obtained while passing through during the migration-seasons—when they are very abundant—belong to the small race.

[To be continued.]

XXV.—*Notes on a Collection of Birds made in British East Africa.* By GERARD H. GURNEY, F.Z.S., M.B.O.U.

WITH the combined objects of shooting big game and collecting birds, I left England for East Africa on December 26th, 1908, and after an uneventful voyage arrived at Mombasa on January 15th, 1909. After spending three days there I went, with Sir Edmund Loder (himself a good naturalist and a splendid shot), by train to Nairobi. Our original intention had been to go on a shooting-trip to the little-known Lake Natron; but, finding that this plan was, for several reasons, impracticable, we decided first of all to make an expedition to the Kauti Plains. So after all the necessary arrangements for a long expedition into the interior had been made, we started in an easterly direction from Nairobi and marched across the Athi Plains to the Athi River as far as Donio Sabuk; thence we turned to the left, recrossed the Athi River, and proceeded over the Kauti Plains nearly as far as Mount Twiniango. Then we retraced our steps, and followed for some days the Thika River, which we finally crossed near Vroni. We came back by the east side of Donio Sabuk, returning to Nairobi on February 17th. Three days later, by the advice of Mr. F. J. Jackson, I went up to Naivasha, where I spent four weeks, chiefly camping at the south end of the lake and on the west